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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

CASCHERA, ANTONIO A

ART UNIT	PAPER NUMBER
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2697

DATE MAILED: 03/18/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/784,852

Applicant(s)

HINO ET AL.

Examiner

Antonio A Caschera

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02/16/2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5-7.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Priority*

1. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copies have been filed in the pending application.

### *Specification*

2. The disclosure is objected to because of the following informalities:
  - a. The phrase, "That is, according to the present intention..." should be replaced with, "That is, according to the present invention..." (see line 1, paragraph 23 on page 7).  
Appropriate correction is required.

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the

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reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims 1-3, 6, 8-10, 16, 17, 23 are rejected under 35 U.S.C. 102(e) as being anticipated by Arai et al. (U.S. Patent 6,121,977).

In reference to claim 1, Arai et al. discloses a image creation apparatus capable of displaying changing states of delicate movements of objects such as real time wave movement in water (see column 2, lines 15-19). Arai et al. discloses defining a region of movement in an image and dividing such region into elongated regions called "slices" (see column 9, lines 42-53, lines 59-65 and Figures 1 and 3A-D). Arai et al. also discloses applying a shifting mask translation to each "slice" and then drawing the shifted slice at a shifted position (see columns 9-10, lines 66-7 and Figures 3A-D). Arai et al. discloses repeating the steps of performing shifted translations on each slice which are located in a random calculated distance and direction from a previous "slice" (see column 10, lines 8-13, S25-S26 of Figure 2 and Figures 3B-D). Note, Arai et al. does not explicitly disclose the combining of the shifted "slices" and the region of movement however it is inherent that since an output image disclosing both shifted "slices" and region of movement is disclosed, a combining step must have occurred within Arai et al. (see #14 of Figure 1).

In reference to claims 2 and 8, Arai et al. discloses all of the claim limitations as applied to claims 1 and 6 respectively in addition, Arai et al. discloses randomly selecting width sway amounts to shift "slices" within a certain range of widths (see columns 9-10, lines 66-13 and Figures 3A-D). Note the office interprets the random generation shifting of "slices" to be similar to applicant's selecting of random mask patterns.

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In reference to claim 3, Arai et al. discloses all of the claim limitations as applied to claim 1 above in addition, Arai et al. discloses the “slices” of a region to be adjacent to each other (see Figures 3A-D).

In reference to claim 6, claim 6 is similar in scope to claims 1 and 4 and therefore is rejected under similar rationale.

In reference to claim 9, claim 9 is similar in scope to claim 1 and therefore is rejected under similar rationale. Note Arai et al. also discloses a computer system for performing graphic manipulations (see column 25, lines 53-62 and Figure 44).

In reference to claim 10, Arai et al. discloses all of the claim limitations as applied to claim 9 above. Claim 10 is similar in scope to claim 2 and therefore is rejected under similar rationale.

In reference to claim 16, claim 16 is similar in scope to claim 1 and therefore is rejected under similar rationale. Note Arai et al. also discloses a computer system using a program for performing graphic manipulations (see column 25, lines 53-62 and Figure 44). It is clear that a computer system using a program must comprise of a sort of recording medium.

In reference to claim 17, Arai et al. discloses all of the claim limitations as applied to claim 16 above. Claim 17 is similar in scope to claim 2 and therefore is rejected under similar rationale. It is clear that a computer system using a program must comprise of a sort of recording medium.

In reference to claim 23, claim 23 is similar in scope to claim 1 and therefore is rejected under similar rationale. Note Arai et al. also discloses a computer system using a program for performing graphic manipulations (see column 25, lines 53-62 and Figure 44).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 4, 5, 7, 11-15, 18-22, 24, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arai et al. (U.S. Patent 6,121,977).

In reference to claim 4, Arai et al. discloses a image creation apparatus capable of displaying changing states of delicate movements of objects such as real time wave movement in water (see column 2, lines 15-19). Arai et al. discloses defining a region of movement in an image and dividing such region into elongated regions called "slices" (see column 9, lines 42-53, lines 59-65 and Figures 1 and 3A-D). Arai et al. discloses randomly selecting width sway amounts to shift "slices" within a certain range of widths (see columns 9-10, lines 66-13 and Figures 3A-D). Arai et al. also discloses applying a shifting translation to each "slice" and then drawing the shifted slice at a shifted position (see columns 9-10, lines 66-7 and Figures 3A-D). Arai et al. discloses repeating the steps of performing shifted translations on each slice which are located in a random calculated distance and direction from a previous "slice" (see column 10, lines 8-13, S25-S26 of Figure 2 and Figures 3B-D). Note, Arai et al. does not explicitly disclose the shimmering of a background image however, referring to Figure 1 of Arai et al., the above graphic manipulations performed on the sway region (#12) of the foreground could be performed on background images as well so that applicant's randomly altered image is interpreted as the

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final reflection in the lake (see #14), the mask pattern as the sway region information (the lake, #12), the composite image as the swayed reflection drawn onto the lake (#14) and the revised image to combine the background with the swayed reflection as shown in (#14). Also, Arai et al. does not explicitly disclose the combining of the shifted “slices”, the region of movement and background of the image however it is inherent that since an output image showing the above is disclosed, a combining step must have occurred within Arai et al. (see #14 of Figure 1).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the image altering steps of Arai et al. whether the image section being altered is a foreground, background or after part of the image as it is simply a matter of where the object to be altered is located in the original image.

In reference to claims 5 and 7, Arai et al. discloses all of the claim limitations as applied to claims 4 and 6 respectively above in addition, Arai et al. discloses defining sway region information as the region of the water surface corresponding to the surface of the lake (see column 9, lines 42-53). Arai et al. discloses calculating a sway movement by way of generating random numbers within a certain range (see columns 9-10, lines 66-13 and Figures 3A-D). Arai et al. discloses displaying the water surface with a precise “sway” (see column 9, lines 40-41) by applying a shifting translation to each “slice” and then drawing the shifted slice at a shifted position (see columns 9-10, lines 66-7 and Figures 3A-D). Arai et al. does not explicitly disclose drawing the texture image in a predetermined texture area however, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize a texture area, such as a texture buffer (see paragraph 70, page 20 of specification), when drawing a texture image in order to temporarily store the texture image before manipulating it as the definition of a buffer is

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well known in the art to temporarily store data ("*buffer*." The Authoritative Dictionary of IEEE Standards Terms. IEEE Press, 2000. 7<sup>th</sup> ed. Pg. 123.).

In reference to claim 11, claim 11 is similar in scope to claim 4 and therefore is rejected under similar rationale. Note Arai et al. also discloses a computer system for performing graphic manipulations (see column 25, lines 53-62 and Figure 44).

In reference to claims 12 and 14, Arai et al. discloses all of the claim limitations as applied to claims 11 and 13 respectively. Claims 12 and 14 are similar in scope to claim 5 and therefore are rejected under similar rationale. Note Arai et al. also discloses a computer system for performing graphic manipulations (see column 25, lines 53-62 and Figure 44).

In reference to claim 13, claim 13 is similar in scope to claims 1 and 4 and therefore is rejected under similar rationale. Note Arai et al. also discloses a computer system for performing graphic manipulations (see column 25, lines 53-62 and Figure 44).

In reference to claim 15, Arai et al. discloses all of the claim limitations as applied to claim 13 above in addition, Arai et al. discloses randomly selecting width sway amounts to shift "slices" within a certain range of widths (see columns 9-10, lines 66-13 and Figures 3A-D). Arai et al. also discloses a computer system using a program for performing graphic manipulations (see column 25, lines 53-62 and Figure 44). Note the office interprets the random generation shifting of "slices" to be similar to applicant's selecting of random mask patterns.

In reference to claim 18, claim 18 is similar in scope to claim 4 and therefore is rejected under similar rationale. Note Arai et al. also discloses a computer system using a program for performing graphic manipulations (see column 25, lines 53-62 and Figure 44). It is clear that a computer system using a program must comprise of a sort of recording medium.



In reference to claims 19 and 21, Arai et al. discloses all of the claim limitations as applied to claims 18 and 20 respectively. Claims 19 and 21 are similar in scope to claim 5 and therefore are rejected under similar rationale. Note Arai et al. also discloses a computer system using a program for performing graphic manipulations (see column 25, lines 53-62 and Figure 44). It is clear that a computer system using a program must comprise of a sort of recording medium.

In reference to claims 20 and 25, claims 20 and 25 are similar in scope to claims 1 and 4 and therefore are rejected under similar rationale. Note Arai et al. also discloses a computer system for performing graphic manipulations (see column 25, lines 53-62 and Figure 44). It is clear that a computer system using a program must comprise of a sort of recording medium.

In reference to claim 22, Arai et al. discloses all of the claim limitations as applied to claim 20 in addition, Arai et al. discloses randomly selecting width sway amounts to shift “slices” within a certain range of widths (see columns 9-10, lines 66-13 and Figures 3A-D). Note the office interprets the random generation shifting of “slices” to be similar to applicant’s selecting of random mask patterns. Also note, Arai et al. discloses a computer system for performing graphic manipulations (see column 25, lines 53-62 and Figure 44). It is clear that a computer system using a program must comprise of a sort of recording medium.

In reference to claim 24, claim 24 is similar in scope to claim 4 and therefore is rejected under similar rationale. Note Arai et al. also discloses a computer system using a program for performing graphic manipulations (see column 25, lines 53-62 and Figure 44).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Antonio Caschera whose telephone number is (703) 305-1391. The examiner can normally be reached Monday-Thursday and alternate Fridays between 7:00 AM and 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Mancuso, can be reached at (703)-305-3885.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

**or faxed to:**

**(703) 872-9314 (for Technology Center 2600 only)**

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

aac

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A handwritten signature in black ink, consisting of a large, stylized capital 'A' followed by a diagonal stroke and some smaller, less legible characters.